

ABSTRACT

There is a need in the computer software and data industries to protect content from unauthorized access to private information. Alphanumeric passwords have been shown to offer very weak protection. Biometrics (personal traits such as fingerprints and hand-written signatures) offer superior protection, but still have a number of weaknesses. The most significant weakness is that there is no existing way to protect the stored biometric data itself; and once a person's fingerprint data has been obtained by an attacker, the use of that fingerprint can no longer be considered secure. The invention solves the problem by securing the access software application that manages the biometric data using tamper-resistant encoding techniques. These tamper-resistant encoding techniques include: data-flow, control-flow, mass-data and white-box encoding.